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**Web site connection system of a mobile communication device and its method - capable of enabling the user to easily and quickly connect to the target web site**

**Patent Assignee:** E TRADE INFORMATION CORP

**Inventors:** CHEN J; WANG H

**Patent Family (1 patent, 1 country)**

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**Priority Application Number (Number Kind Date):** TW 2000105025 A 20000317

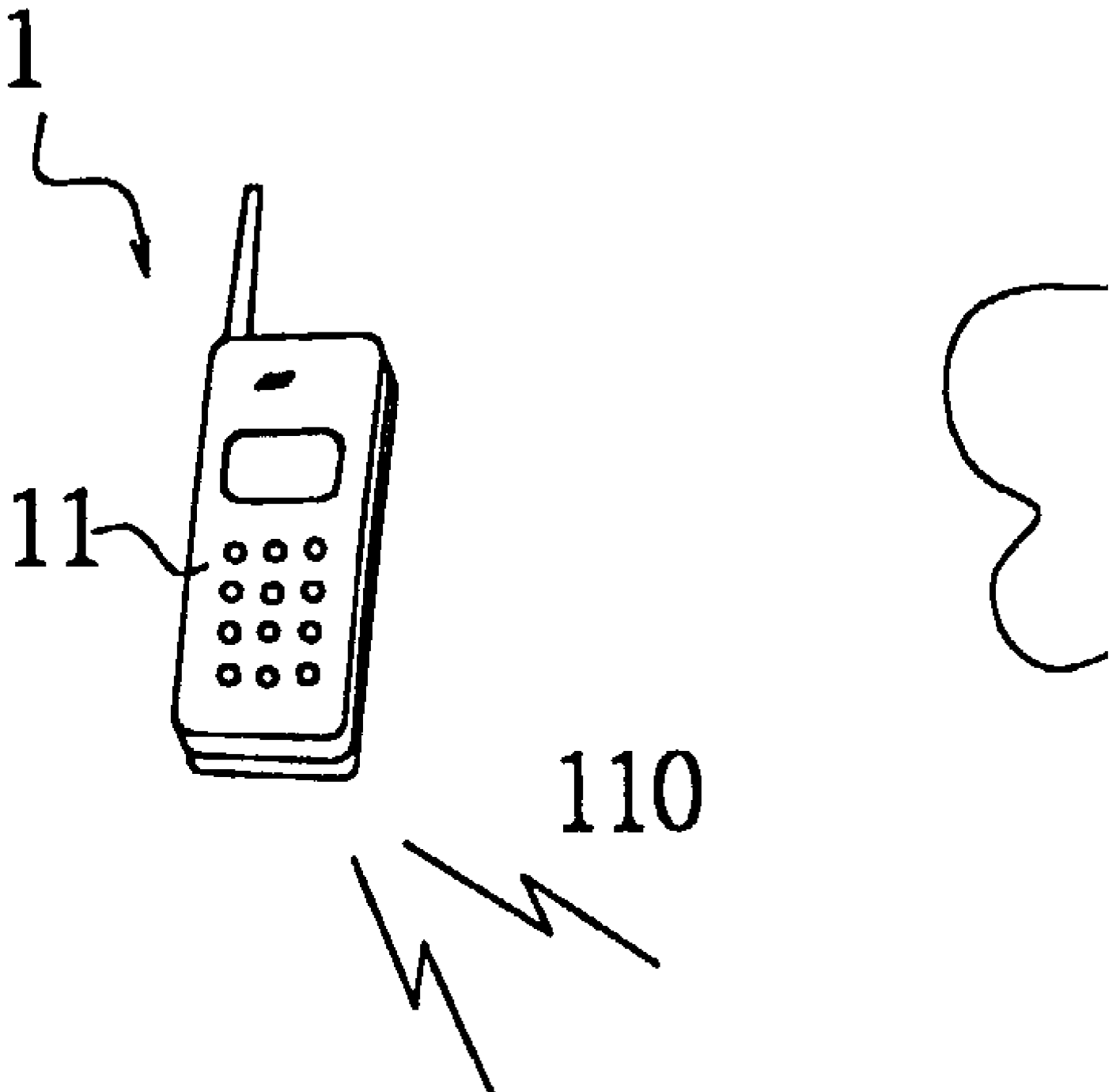
**Patent Details**

Patent Number	Kind	Language	Pages	Drawings	Filing Notes
TW 463483	A	ZH		1	

**Alerting Abstract:** TW A

NOVELTY - This invention relates to a web site connection server, which consists of a database of web site addresses and a search engine. The user only needs to simply key in a virtual character string consisting of letters and numbers through a mobile communication device. Numerical strings are preferred because of easy data entry through numerical keyboards. When the web site connection server receives the virtual character string, the search engine looks for index character strings same as the virtual character string and their corresponding real web site addresses within the database of web site addresses. Thus, the user only needs to key in an easier virtual character string, and then can be connected immediately to the corresponding target web site on the Internet. This invention can further categorize the searched target web sites to provide selection for the users or to know the intention of the on-line users. Therefore, related commercial information is attached to provide real-time one-to-one commercial marketing.

**Main Drawing Sheet(s) or Clipped Structure(s)**



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## **English Translation of the cited reference**

### **CLAIMS**

1. A system of linking websites for mobile communication devices, capable of receiving virtual strings sent out by the mobile communication devices and linking those to target websites of Internet within a website linking server, the virtual strings are composed of alphanumeric characters, wherein the system at least comprising:
  - a receiving device for receiving the virtual strings;
  - a website address database, storing:
    - multiple index strings, each of which is composed of alphanumeric characters;
    - multiple actual website addresses, each of which points to a target website, and each of the index strings corresponding to at least one actual website address;
  - a searching device, used for searching and comparing the index strings of the website database to the virtual strings, and selecting at least one index string and its corresponding actual website address to be the same as the virtual string; and
  - an output device for outputting the selected actual website address.
2. The system of claim 1, wherein the output device directs the selected actual website address to link to a corresponding target website.
3. The system of claim 1, wherein the output device transmits all the selected actual website addresses back to the mobile communication devices.
4. The system of claim 1, wherein the output device transmits additional advertisement information during output.
5. The system of claim 1, wherein also comprising a hyperlink device, which is used for hyperlinking the selected actual website addresses to the corresponding target websites.
6. The system of claim 1, wherein also comprising a website classifying device, which is used to classify the target websites.
7. The system of claim 1, wherein the virtual strings are composed of language characters other than English.
8. The system of claim 1, wherein the searching device uses approximate matching techniques for searching and comparing the virtual strings to the index strings.
9. A method of linking websites for mobile communication devices, capable of receiving virtual strings sent out by the mobile communication devices and linking those to target websites of Internet within a website linking server, the virtual strings are composed of alphanumeric characters, the website linking server

comprising a website address database, storing multiple index strings and multiple actual website addresses, each of the index strings corresponding to at least one actual website address, and each actual website points to a target website; wherein the method includes the following steps:

- (A) Receiving the virtual strings;
- (B) Searching and comparing the index strings of the website database to the virtual strings, and selecting at least one index string and its corresponding actual website address to be the same as the virtual string; and
- (C) Outputting all the selected actual website addresses.

10. The method of claim 9, wherein the step (C) directs the selected actual website addresses to link to corresponding target websites.
11. The method of claim 9, wherein the step (C) transmits all the selected actual website addresses back to the mobile communication devices.
12. The method of claim 9, wherein the step (C) transmits additional advertisement information during output.
13. The methods of claim 9, wherein the virtual strings are composed of language characters other than English.
14. The methods of claim 9, wherein the step (B) uses approximate matching techniques for searching and comparing the index strings to the virtual strings.
15. A computer readable medium carrying software program for linking websites, the software program capable of receiving virtual strings sent out by the mobile communication devices and linking those to target websites of Internet within a website linking server, the virtual strings are composed of alphanumeric characters, wherein the software program at least comprising:
  - a first program code for receiving the virtual strings;
  - a second program code, including:
    - multiple index strings, each of which is composed of alphanumeric characters;
    - multiple actual website addresses, each of which points to a target website, and each of the index strings corresponding to at least one actual website address;
  - a third program code, used for searching and comparing the index strings of the website database to the virtual strings, and selecting at least one index string and its corresponding actual website address to be the same as the virtual string; and
  - a fourth program code for outputting the selected actual website.
16. The computer readable medium of claim 15, wherein the fourth program code directs the selected actual website address to link to a corresponding target website.

17. The computer readable medium of claim 15, wherein the fourth program code transmits all the selected actual website addresses back to the mobile communication devices.
18. The computer readable medium of claim 15, wherein also comprising a fifth program code, which is used to classify the target websites.
19. The computer readable medium of claim 15, wherein the virtual strings are composed of language characters other than English.
20. The computer readable medium of claim 15, wherein the third program code uses approximate matching techniques for searching and comparing the index strings to the virtual strings.

### **Description of Drawings**

Fig. 1 an exemplary of linking website for communication devices in accordance with embodiments of the present invention

Fig. 2 a schematic diagram of partial structure of a website linking server.

Fig 3. a data structure diagram of a website database.

Fig 4 a numerical keypad of a mobile phone

Fig. 5 a flow chart of showing exemplary steps of linking website in accordance with embodiments of the present invention

### **Symbols of Drawings (Partial)**

Fig. 2 -

- 31 -- Receiving device
- 32- Website database
- 33- Searching device
- 34- Output device
- 35- Hyperlink device
- 36- Website classifying device

Fig. 5 -

- A. Receiving virtual strings
- B. Searching and comparing the index strings of the website database to the virtual strings, and selecting at least one index string and its corresponding actual website address to be the same as the virtual string.
- B1. Classifying all the selected actual website addresses and/or adding hyperlink
- C. Outputting all the selected actual website addresses.

第93106412 號公告引證附件

中華民國專利公報 [19] [12]

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發明

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H04Q7/00

[54]名 稱：行動通訊設備之連結網站系統及其方法

[21]申請案號： 089105025

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楊慶隆 先生

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[57]申請專利範圍：

1.一種行動通訊設備之連結網站系統，  
使用於網站連結伺服器內，能接收由  
行動通訊設備發出之虛擬字串並將其  
連結至網際網路上之目標網站，該虛  
擬字串係由文數字組成；其中，該連  
結網站系統至少包括：

一接收裝置，用以接收該虛擬字串；

一網址資料庫，儲存有：

複數個索引字串，每一索引字串係由  
文數字組成，

複數個實際網址，每一實際網址指向  
一目標網站，且每一個索引字串對應  
於至少一實際網址；

一搜尋裝置，用以搜尋比對該虛擬字  
串與網址資料庫之該等索引字串，並  
選出與該虛擬字串相同之至少一索引  
字串及其對應之實際網址；以及  
一輸出裝置，用以輸出所選出之實際  
網址。

2.如申請專利範圍第1項所述之行動通訊

設備之連結網站系統，其中該輸出裝  
置係將所選出之實際網址直接導向並  
連結至所對應之目標網站。

3.如申請專利範圍第1項所述之行動通訊  
設備之連結網站系統，其中該輸出裝  
置係將所選出之實際網址傳送回行動  
通訊設備。

4.如申請專利範圍第1項所述之行動通訊  
設備之連結網站系統，其中該輸出裝  
置輸出時係再附加上廣告資訊。

5.如申請專利範圍第1項所述之行動通訊  
設備之連結網站系統，其尚包括一超  
連結裝置，用以將所選出之實際網址  
超連結至所對應之目標網站。

6.如申請專利範圍第1項所述之行動通訊  
設備之連結網站系統，其尚包括一網  
址分類裝置，用以將目標網站加以分  
類。

7.如申請專利範圍第1項所述之行動通訊  
設備之連結網站系統，其中該虛擬字

(2)

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串由非英語系之其他國家語言文字組成。

- 8.如申請專利範圍第1項所述之行動通訊設備之連結網站系統，其中該搜尋裝置搜尋比對虛擬字串與該等索引字串時，係採用模糊比對技術。
- 9.一種行動通訊設備之連結網站方法，使用於網站連結伺服器內，能接收由行動通訊設備發出之虛擬字串並將其連結至網際網路上之目標網站，該虛擬字串係由文數字組成，該網站連結伺服器內包括一網址資料庫儲存有由文數字組成之複數個索引字串，以及複數個實際網址，每一個索引字串對應於至少一實際網址，且每一實際網址指向一目標網站；其中，該連結網站方法主要包括以下步驟：  
(A)接收該虛擬字串；  
(B)搜尋比對該虛擬字串與網址資料庫之該等複數個索引字串，並選出與該虛擬字串相同之至少一索引字串及其對應之實際網址；以及  
(C)輸出所選出之實際網址。
- 10.如申請專利範圍第9項所述之行動通訊設備之連結網站方法，其中該步驟C係將所選出之實際網址直接導向並連結至所對應之目標網站。
- 11.如申請專利範圍第9項所述之行動通訊設備之連結網站方法，其中該步驟C係將所選出之實際網址傳送回行動通訊設備。
- 12.如申請專利範圍第9項所述之行動通訊設備之連結網站方法，其中該步驟C輸出時係再附加上廣告資訊。
- 13.如申請專利範圍第9項所述之行動通訊設備之連結網站方法，其中該虛擬字串由非英語系之其他國家語言文字組成。
- 14.如申請專利範圍第9項所述之行動通訊設備之連結網站方法，其中該步驟

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B於搜尋比對虛擬字串與該等索引字串時，係採用模糊比對技術。

- 15.一種電腦可讀取記錄媒體，載有一連結網站軟體程式，該軟體程式用於網站連結伺服器內，能接收由行動通訊設備發出之虛擬字串並將其連結至網際網路上之目標網站，該虛擬字串係由文數字組成；其中該軟體程式至少包括：  
5. 第一程式碼，用以接收該虛擬字串；  
第二程式碼，包括：  
複數個索引字串，每一索引字串由文數字組成，及  
複數個實際網址，每一實際網址指向一目標網站，且每一個索引字串對應於至少一實際網址；  
15. 第三程式碼，用以搜尋比對該虛擬字串與網址資料庫之該等索引字串，並選出與該虛擬字串相同之至少一索引字串及其對應之實際網址；以及  
20. 第四程式碼，用以輸出所選出之實際網址。
- 16.如申請專利範圍第15項所述之記錄媒體，其中該第四程式碼又能將所選出之實際網址直接導向並連結至所對應之目標網站。
- 17.如申請專利範圍第15項所述之記錄媒體，其中該第四程式碼又能將所選出之實際網址傳送回行動通訊設備。
30. 18.如申請專利範圍第15項所述之記錄媒體，其尚包括第五程式碼，用以將目標網站加以分類。
- 19.如申請專利範圍第15項所述之記錄媒體，其中該虛擬字串由非英語系之其他國家語言文字組成。
35. 20.如申請專利範圍第15項所述之記錄媒體，其中該第三程式碼搜尋比對虛擬字串與該等索引字串時，係採用模糊比對技術。
40. 圖式簡單說明：



(3)

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第一圖係本發明實施例連結至網際網路之示意圖，其中包括有手機、個人數位助理二種連結網站方式。

第二圖係本發明實施例網站連結伺服器之部分架構圖。

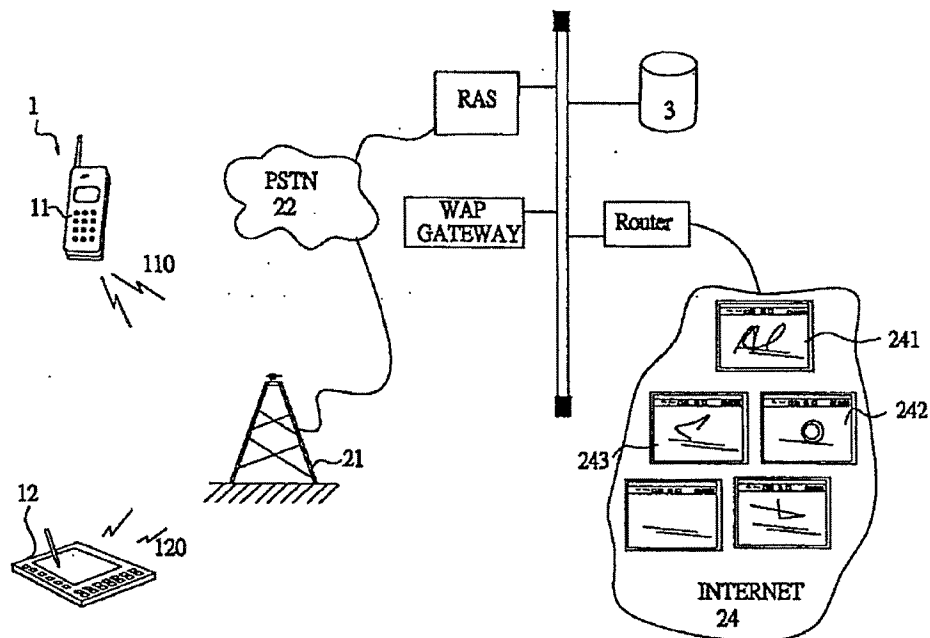
第三圖係本發明實施例網址資料庫

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內儲存之資料結構圖。

第四圖係本發明實施例所使用之手機一般數字鍵盤。

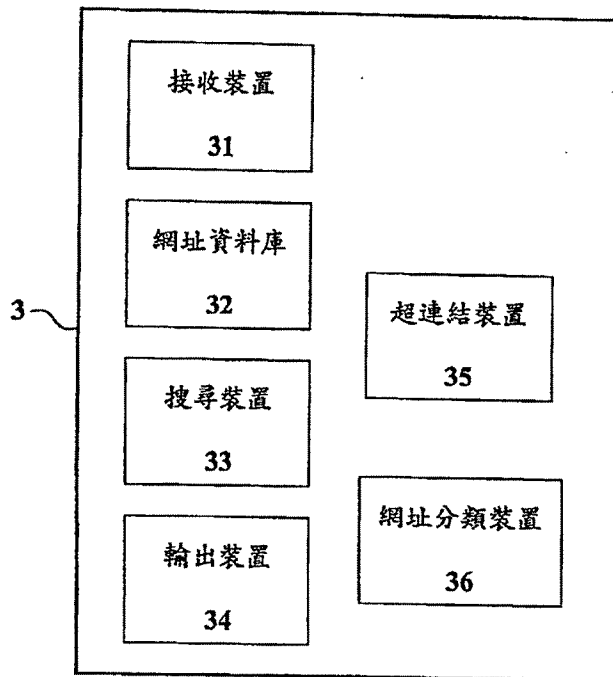
第五圖係本發明實施例連結網站之流程图。



第一圖

(Fig. 1)

(4)



第二圖

(Fig. 2)

第四圖  
(Fig. 4)

	ABC	DEF
1	2	3
GHI 4	JKL 5	MNO 6
PQRS 7	TUV 8	WXYZ 9
*	0	#

(5)

32

索引字串 3201	實際網址 3202	備註 (縮寫)
.....	.....	.....
222	www.bbc.co.uk/mobile/mainmenu.wml	bbc
3722489	wap.eracity.com	eracity
37427766	www.ericsson.com	ericsson
66542	www.nokia.com	nokia
66867652	www.motorola.com	motorola
726276642	www.panasonic.com	panasonic
727	wap.sap.com	sap
7669	www.sony.com	sony
7669	www.pony.com	pony
921467433	wapinside.com/wap	wapinside
92466	www.yahoo.com	yahoo
937662453	wap.yesmobile.com.tw	yesmobile
.....	.....	.....
bbc	www.bbc.co.uk/mobile/mainmenu.wml	
eracity	wap.eracity.com	年代
ericsson	www.ericsson.com	
motorola	www.motorola.com	
nokia	www.nokia.com	
panasonic	www.panasonic.com	
pony	www.pony.com	
sap	wap.sap.com	
sony	www.sony.com	
wapinside	wapinside.com/wap	
yahoo	www.yahoo.com	
yesmobile	wap.yesmobile.com.tw	訊通
.....	.....	.....
年代	wap.eracity.com	eracity
訊通	wap.yesmobile.com.tw	yesmobile
.....	.....	.....
.....	.....	.....

3211

3212

240

241

3222

3232

242

3242

243

3251

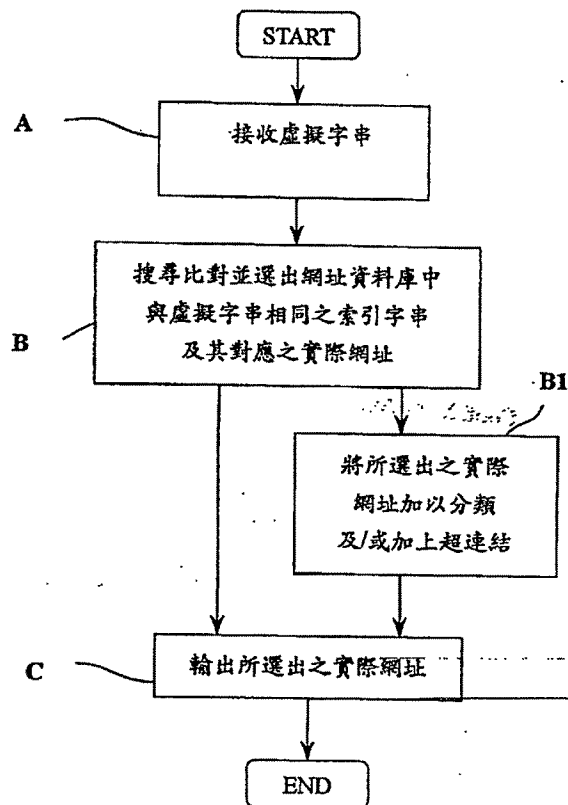
3252

3261

3262

第三圖

(Fig. 3)



第五圖

(Fig. 5)